

## UNITED STATES PATENT AND TRADEMARK OFFICE

Re

Application of:

Xiu Xiu Cheng, et al.

Serial No.:

09/705,625

Filed:

November 3, 2000

For:

Methods for Treating Diabetes Via Administration Of Controlled Release

Metformin

Examiner: T. Ware

Art Unit: 1615

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

February 28, 2003

Sir:

In accordance with Applicant's duty of disclosure under 37 C.F.R.§1.56 and the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants hereby make of record the documents listed on the accompanying Form PTO-1449 for consideration by the Examiner in connection with the examination of the above-identified patent application.

Applicants note that reference AM is being submitted in an envelope labeled "PROPRIETARY MATERIAL NOT OPEN TO PUBLIC. TO BE OPENED ONLY BY EXAMINER OR OTHER AUTHORIZED U.S. PATENT AND TRADEMARK OFFICE EMPLOYEE." as this material in the envelope is considered proprietary and is being submitted for consideration under MPEP §724 (8th Edition).

The biostudy (which resulted in the data submitted as reference AM) was performed using formulations prepared in accordance with U.S. Patent No. 6,099,859. It is noted that the exemplified formulations did <u>not</u> provide a T<sub>max</sub> between 8-12 hours except when the formulation prepared in accordance with Example 3 was administered at dinner. As set forth in the accompanying biostudy data, the mean T<sub>max</sub> values for the Examples of the '859 were as follows: Example 1 (fasting) 4.67 hours (*See, e.g.*, pages 1 and 3 of the biostudy); Example 2 (fasting) 4.33 hours (*See, e.g.*, pages 10 and 12 of the biostudy); Example 2 (fed a.m.) 6.80 hours (*See, e.g.*, pages 13, 14 and 16 of the biostudy); Example 3 (fed a.m.) 6.67 hours (*See, e.g.*, pages 4 and 6 the biostudy); Example 3 (Fed p.m.) 9.67 hours (*See, e.g.*, pages 17 and 20 of the biostudy). Therefore, the only instance that the T<sub>max</sub> was between 8-12 hours was Example 3 fed in the P.M. (at dinner).

In addition, pages 2, 5, 11, 15, 19 of the biostudy data includes plasma concentration v. time graphs and data for formulations prepared in accordance with Examples 1(fasting), 3 (fed), 2 (fasting), 2 (fed), and 3 (fed), respectively, of U.S. Patent No. 6,099,859; pages 8 and 9 of the biostudy data include plasma concentration v. time graphs and data for formulations prepared in accordance with Example 2 (fasting and fed) and Example 3 (fed a.m. and p.m.) of U.S. Patent No. 6,099,859; and pages 7 and 18 include plasma concentration v. time graphs and data for formulations prepared in accordance with Example 3 (fed a.m. and p.m.) of U.S. Patent No. 6,099,859.



This Information Disclosure Statement is being filed after a First Office Action but before a Final Office Action or Notice of Allowance. Pursuant to 37 C.F.R. § 1.98(c), a check for \$180.00 is enclosed to cover the required fee. However, if it is determined that any fee is due, the Examiner is authorized to charge said fee to Attorney Deposit Account No. 50-0552.

Respectfully submitted,
DAVIDSON, DAVIDSON & KAPPEL, LLC

By:

Clifford M. Davidson Reg. No. 32,728

Davidson, Davidson & Kappel, LLC 485 Seventh Avenue, 14th Floor New York, New York 10018 (212) 736-1940

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

## Y INITED STATES PATENT AND TRADEMARK OFFICE

Examiner: To Be Assigned

Art Unit: 1614

Re: Application of:

Chih-Ming CHEN, et al.

Serial No.:

09/705,625

Filed:

November 3, 2000

For:

METHODS FOR TREATING

DIABETES VIA ADMINISTRATION

OF CONTROLLED RELEASE

**METFORMIN** 

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

September 17, 2001

Sir:

In accordance with Applicant's duty of disclosure under 37 C.F.R.§1.56 and the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants hereby make of record the documents listed on the accompanying PTO-1449 Form for consideration by the Examiner in connection with the examination of the above-identified patent application.

This Information Disclosure Statement is filed under 37 C.F.R. §1.97(b) before the mailing of a first Office Action on the merits. Accordingly, it is believed that no fee is due.

I hereby certify that the documents referred to as attached therein and/or fee are being deposited with the United States Postal Service with sufficient postage as "first class mail" in an envelope addressed to "Assistant Commissioner for Patents, Washington, D.C. 20231" on September 17, 2001

DAVIDSON, DAVIDSON & KAPPEL, LLC

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However, if it is determined that any fee is due, the Examiner is authorized to charge said fee to Attorney Deposit Account No. 50-0552.

It is respectfully requested that the references cited on the accompanying PTO Form-1449 be considered and made of record. If any of the publications listed thereon are missing, the Examiner is requested to contact the undersigned so that a copy can be promptly forwarded.

It is respectfully submitted that the pending claims are patentable over all the references made of record at this time.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By:

Robert J. Paradiso Reg. No. 41,240

Davidson, Davidson & Kappel, LLC 485 Seventh Avenue, 14th Floor New York, New York 10018 (212) 736-1940

FORM PTO-1449 U.S. DEPARTMENT OF CO ATTY. DOCKET NO. SERIAL NO. PATENT AND TRADEMARK OFFICE (REV. 7-80) 300.1012 09/705,625 LIST OF REFERENCES CITED BY APPLICANT APPLICANTS (Use several sheets if necessary) Chih-Ming CHEN, et al. FILING DATE GROUP November 3, 2000 1614 U.S. PATENT DOCUMENTS EXAMINER DATE NAME **CLASS** SUB-FILING DATE IF INITIAL CLASS APPROPRIATE o 0 1/4/00 Al-Razzak et al. AA 6 7 424 464 ΑB 8 1/12/99 Cho 424 450 AC 9 11/25/97 Inman et al. 514 691 ΑD 5 6 8 8 5 1 11/18/97 Ayer et al. 424 422 ΑE 7 n 10/7/97 6 Ubillas et al 514 557 ΑF 5 6 6 8 7 9/16/97 Shapiro 55 514 7 ΑG 0 9/16/97 Wong et al. 424 472 5 7 AΗ 5 6 0 0 7/22/97 Wright et al. 424 473 ΑI 5 6 3 2 2 4 5/20/97 Efendic et al. 514 12 5/13/97 Luo et al. 514 284 FOREIGN PATENT DOCUMENTS DATE COUNTRY CLASS SUB-TRANSLATION CLASS YES NO AK · 9/23/99 wo A61K 9/24 ΑL 9 9 9/23/99 wo A61K 9/20 AM 9 9 2 9 3 4 6/17/99 wo A61K 31/155 6 0 8 4 3 3/21/96 wo A61K 31/155 OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.) ΑO Physicians' Desk Reference (54th Ed. 2000), pp. 831-835. Sheen, Andre J., Clinical Pharmacokinetics of Metformin, Clinical Pharmacokinetics, May 30, 1996, 5:359-371. ΑP ΑQ Bailey, Clifford J., et al., Metformin, The New England Journal of Medicine, Feb. 29, 1996, 334:574-579. AR Dunn, Christopher J., et al., Metformin: A Review of its Pharmacological Properties and Therapeutic Use in Non-Insulin-Dependent Diabetes Mellitus, Drugs (1995), 49:721-747. AS Karttunen, P., et al., The Pharmacokinetics of Metformin: A Comparison of the Properties of a Rapid-Release and a Sustained-Release Preparation, pp. 31-36. DATE CONSIDERED \*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY. DOCKET NO. SERIAL NO. (REV. 7-80) PATENT AND TRADEMARK OFFICE 300,1012 09/705,625 LIST OF REFERENCES CITED BY APPLICANT **APPLICANTS** (Use several sheets if necessary) Chih-Ming CHEN, et al. FILING DATE **GROUP** November 3, 20000 1614 U.S. PATENT DOCUMENTS **EXAMINER** DATE NAME CLASS SUB-FILING DATE IF INITIAL **CLASS** APPROPRIATE ВА 3/25/97 Dong et al. 524 377 BB 1/7/97 Kuczynski et al. 424 486 BC 3 8/13/96 Kuczynski et al. 424 473 8/6/96 Roorda et al. 424 484 ΒE 5 9 4/30/96 Landrau et al. 424 449 BF 7 3 5/9/95 Wong et al. 604 892.1 BG 3 0 5/3/94 Balaban et al. 604 892.1 BH 8 2/9/93 Ayer et al. 473 424 ы 5 1/12/93 Guittard et al. 424 473 BJ 5 8/25/92 Ayer et al. 424 473 McClelland et al. BK 5 2 0 6/9/92 1 8 424 473 BL 0 7 5/5/92 Wong et al. 424 438 BM 0 9 0 2/25/92 Kuczynski et al. 424 473 BN 7 5 0 0 6 12/10/91 Ayer et al. 264 112во 0 2 8 3 6/18/91 Kuczynski et al. 514 255.06 BP 4 9 10/16/90 Eckenhoff 604 892.1 BQ 4 9 7 9 8 2 1/9/90 Shah et al. 424 473 BR 6 5 9 5 8 9/12/89 Eckenhoff 604 892.1 FOREIGN PATENT DOCUMENTS DATE COUNTRY CLASS SUB-TRANSLATION CLASS YES NO BS OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.) BT **EXAMINER** DATE CONSIDERED \*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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